USGS
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Earthquake Shaking 🟢 **Green Alert**

GSN · USAID FROM THE AMERICAN PEOPLE · ANSS

M 5.7, 102 km S of Smara, Costa Rica

Origin Time: 2021-06-10 23:27:02 UTC (Thu 17:27:02 local)
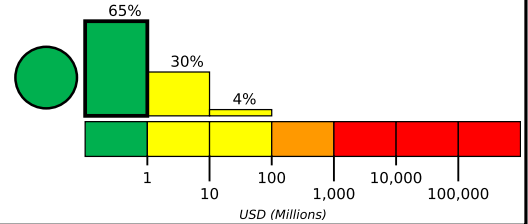Location: 8.9610° N 85.4230° W Depth: 10.0 km

PAGER
Version 6

Created: 1 day, 1 hour after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.
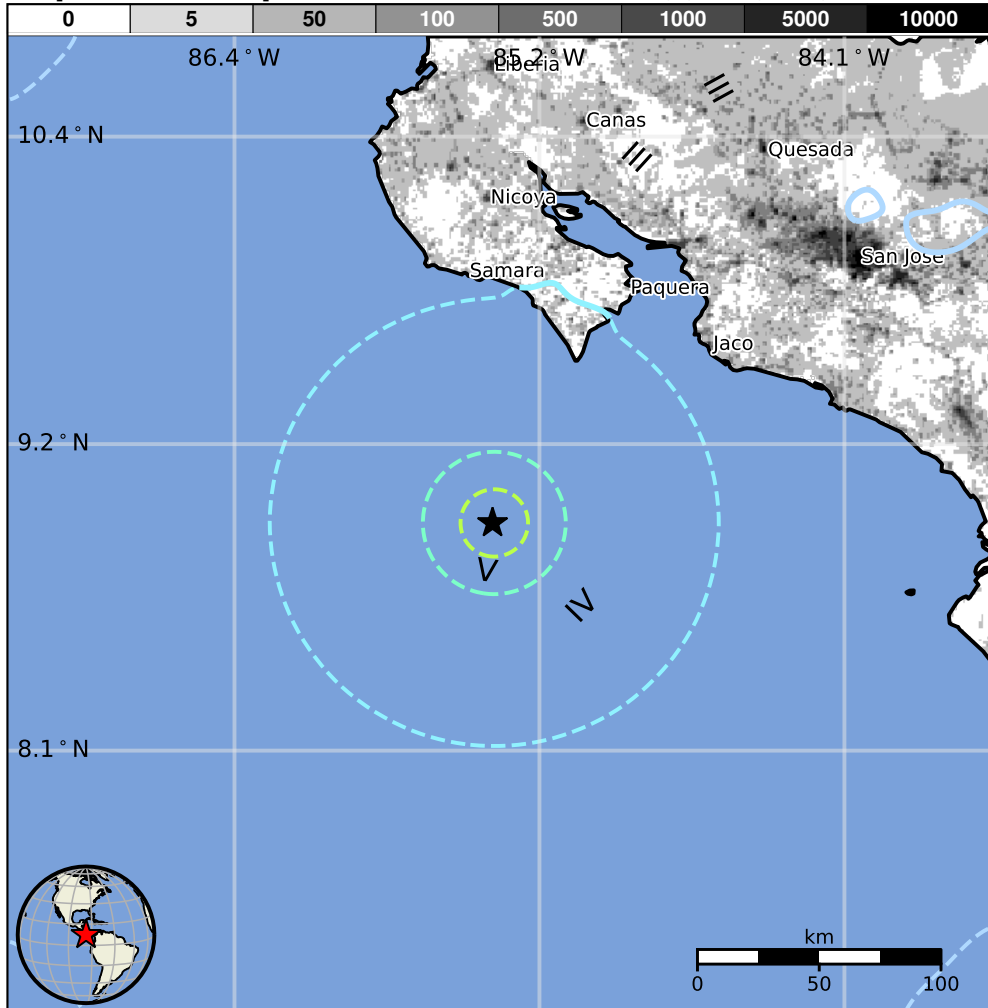
65% | 30% | 4%

1 · 10 · 100 · 1,000 · 10,000 · 100,000
Fatalities

Estimated Economic Losses

65% | 30% | 4%

1 · 10 · 100 · 1,000 · 10,000 · 100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		−*	4,409k*	93k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0 · 5 · 50 · 100 · 500 · 1000 · 5000 · 10000

Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1993-07-10	220	5.8	VII(45k)	1
2000-07-06	337	5.4	VII(173k)	7
1972-12-23	384	6.2	VIII(311k)	11k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	Nandayure	2k
IV	Bejuco	<1k
IV	**Paquera**	**2k**
IV	Parrita	4k
IV	Chacarita	26k
IV	**Jaco**	**4k**
III	Puntarenas	36k
III	**Liberia**	**45k**
III	**San Jose**	**335k**
III	Cartago	27k
III	Alajuela	47k

bold cities appear on map.   (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/us7000ebw8#pager

Event ID: us7000ebw8